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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,473	03/13/2001	Byron James Cronk	55861USA5A	3754

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EXAMINER

LAZOR, MICHELLE A

ART UNIT PAPER NUMBER

1734

DATE MAILED: 09/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/805,473

Applicant(s)

CRONK ET AL.

Examiner

Michelle A Lazor

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 14-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-13 is/are rejected.
- 7) ☒ Claim(s) 4-6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1 – 13, drawn to an apparatus for coating a filament, classified in class 118, subclass 300+.
 - II. Claims 14 – 19, drawn to a method of recoating a bare portion of a filament, classified in class 427, subclass 492.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process, such as a process of coating a coated filament or coating a filament in general, as opposed to a process of recoating a bare portion of a filament.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Mr. Alan Ball on 13 August 2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 1 – 13.

Affirmation of this election must be made by applicant in replying to this Office action. Claims

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14 - 19 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear how the type of coating composition sprayed onto the filament further limits the claimed apparatus.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 1 – 3, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imamura et al. (EP 1035425) in view of Au et al. (U.S. Patent No. 6596203).

Regarding Claims 1 and 2, Imamura et al. disclose an optical fiber coating apparatus comprising a frame (31); a carriage mounted on said frame that is capable of oscillating between a first position and a second position by driving the motor in reverse (Figure 19; page 18, paragraph 135); a first optical fiber holding fixture (34) mounted on said carriage; a second optical fiber holding fixture (35) mounted on said carriage in axial alignment with said first optical fiber holding fixture; at least one radiation source attached to said frame at said second position (page 18, paragraphs 130 – 131); but do not specifically disclose a spray head. However, Au et al. disclose utilizing a coating head and subsequently sending the fiber through a UV radiation curing apparatus (column 2, lines 11 – 21). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention have both a radiation source and a spray head at said first and second positions, respectively, to increase production and decrease manufacturing steps involved with treating an optical fiber.

Regarding Claim 3, Imamura et al. disclose an apparatus comprising a filament organizer having an extended filament between a lockable spool and a rotary spool; a frame adapted for releasable connection to said filament organizer as can be noted by the separate pieces of the apparatus (Figure 19); and at least one radiation source attached to said frame, said filament organizer having adjustable movement over a distance; but again, Imamura et al. do not specifically disclose a spray head. However, Au et al. disclose utilizing a coating head and subsequently sending the fiber through a UV radiation curing apparatus (column 2, lines 11 – 21). Therefore it would have been obvious to one of ordinary skill in the art at the time of the

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invention to have both a radiation source and a spray head to increase production and decrease manufacturing steps involved with treating an optical fiber.

Regarding Claims 12 and 13, the apparatus disclosed by Imamura et al. is considered to be capable of using a curable coating composition that is a 100% solids, ionically curable composition that is curable in the presence of oxygen.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Imamura et al. and Au et al. as applied in Claim 3 above, in view of Kato et al. (JP 60-122754) or English language translation for JP 60-122754, and Hosoya (JP 64-13105) or English language translation of JP 401013105.

Imamura et al. and Au et al. disclose all the limitations of Claim 3, but do not disclose a plurality of spray heads and radiation sources to apply and cure said curable coating composition to cover the surface around the circumference of a filament. However, Kato et al. disclose a plurality of spray heads (Figures 1 - 4) and Hosoya discloses a plurality of radiation sources (Figure 1; English translation for JP 60-122754: Constitution). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have a plurality of spray heads and radiation sources around the circumference of a filament to efficiently and uniformly coat the filament.

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Imamura et al. and Au et al. as applied in Claim 3 above, in view of Freychet et al. (U.S. Patent No. 5119464).

Imamura et al. and Au et al. disclose all the limitations of Claim 3, but do not disclose said spray head to be an ink jet spray head. However, Freychet et al. disclose a spray head coating optical fibers to be an inkjet (Abstract). Therefore it would have been obvious to one of

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ordinary skill in the art at the time of the invention to use an ink jet spray head since it is novel and well known to use in the art.

12. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Imamura et al. and Au et al. as applied in Claim 3 above, in view of Jacobsen (U.S. Patent No. 5273622).

Imamura et al. and Au et al. disclose all the limitations of Claim 3, but do not disclose said spray head to be an ultrasonic atomizer spray head. However, Jacobsen discloses a spray head coating filaments to be an ultrasonic atomizer spray head (column 3, lines 11 – 26). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use an ultrasonic atomizer spray head as an alternative way of applying a coating.

13. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imamura et al., Au et al., and Jacobsen as applied in Claim 9 above, in view of Bachmann (U.S. Patent No. 5387444).

Imamura et al., Au et al., and Jacobsen disclose all the limitations of Claim 9, but do not disclose said ultrasonic atomizer spray head to include an air knife deflector. However, Bachmann discloses using an air knife deflector, considered to inherently include an air entry and exit slot, when using an ultrasonic atomizer spray head (column 4, lines 34 – 39 and column 6, lines 7 – 18). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use an air knife deflector when using an ultrasonic atomizer spray head to provide added control of the coating pattern (column 6, lines 14 – 18).

Allowable Subject Matter

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14. Claims 4 - 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. There was no reference in the prior art search that disclosed, taught, or suggested a filament organizer including a support having a first surface opposite a second surface and at least a pair of through holes, said lockable spool and said rotary spool being attached adjacent to said first surface.

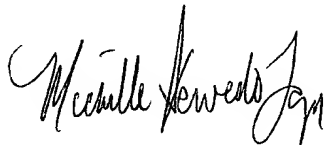
Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Atkins et al. (U.S. Patent No. 5745615) disclose rotary spools and a radiation source (Figure 4).

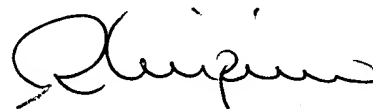
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle A Lazor whose telephone number is 703-305-7976. The examiner can normally be reached on Mon - Thurs 6:30 - 4:00, Fridays 6:30 - 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 703-308-3853. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



MAL



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